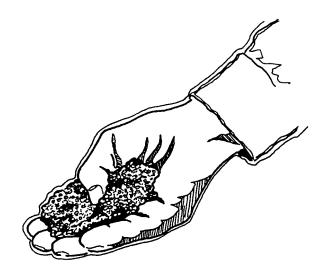


## Mon-Dak Soil Quality Score Card



For	Cron	Year:		
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This Soil Quality Score Card was developed by farmers, for farmers, to evaluate and track soil quality on their farms. By scoring a particular site(s) within a field each year, you will develop a record of how the crops you grow and the way you grow them are affecting the quality of your soil. This will provide you with information to make decisions that will improve or maintain your soil quality.

## How to Use this Card

Record the date and location at the beginning of each series of nine soil quality factors, then simply circle **Good**, **Medium**, or **Poor** for each factor to describe the soil quality at the site. Do your best to evaluate each soil quality factor under similar moisture conditions from year to year. Record any useful information relating to the weather, crops grown, yields, etc. in the "Notes" section that will help you assess any effects on soil quality for that site,

For more information or assistance using this card, contact your local soil conservation district.

## How to Improve Your Soil Quality

- \* Conserve moisture, keep the soil cool, encourage earthworm activity, and prevent erosion by maintaining growing crops and/or crop residues on the soil surface as much as possible.
- \* Increase organic matter by continuous cropping, growing high-residue crops, maintaining adequate levels of fertility, reducing tillage, properly applying manure, not burning crop residues.
- \* Reduce compaction by growing deep rooted perennial plants, and don't till soils when they are wet.
- Increase the quality and quantity of microscopic life in the soil by increasing the diversity of crops grown, particularly legumes.

## Glossarv

**Blocky** - The shape of a soil particle that resembles a cube or is block-like.

**Continuous Cropping** - A rotation of growing a crop every year on the same land.

**Deep Rooted Perennial Plants** - A perennial plant with a rooting depth greater than 4 feet. (e.g. alfalfa)

**Deposition** - The accumulation of eroded soil material on the soil surface.

**Diversity of Crops Grown** - Combinations of warm or cool season, broadleaf or grass type crops.

Fungi - Fine, usually white hair-like fibers in the soil.

**Infiltration** - The rate of which water enters the soil surface.

**Legumes** - Crops that are nitrogen-fixing and are often used for green manure, forage, and seed production.

Root Mass - Number of roots in an area the size of your index fingernail.

<1 = Few 1 - 5 = Common >5 = Abundant

**Soil Quality** - The ability of the soil to function.

**Sweet "Earthy" Odor** - The earthy odor we smell from fresh tilled soil are the gases given off from micro organisms living in the soil. The more organisms working, the stronger the odor.

**Tilth** - The condition of the soil as it relates to the ease of tillage and quality of the seedbed.

Date: Crop:			
Location:			
(Circle Good, Medium, Poor)	_		
Root Mass (anytime)	Tilth (spring)		
Good - abundant vertical and horizontal roots	Good - mellow, crumbly, works easy		
Medium - more horizontal than vertical roots	<b>Medium</b> - some crusting, small clods, medium pull		
Poor - few roots, most horizontal	Poor - crusting, large clods, works hard		
Smell (spring)			
Good - pungent, sweet "earthy" odor	Infiltration (spring, after rain)  Good - rain soaks into soil quickly  Medium - rain soaks in, some ponding		
Medium - some odor, mineral odor			
Poor - little or no odor			
anna	Poor - rain ponds on soil surface		
Feel (spring)	West and Waller E. S. C.		
Good - soil crumbles easily	Wind and/or Water Erosion (summer)		
Medium - soil difficult to crumble	Good - no visible soil movement		
Poor - soil hard, blocky	Medium - some deposition evident		
·	Poor - deposition obvious		
Porosity (spring before tillage)	Crop Residue (fall)		
Good - many worm and/or root channels	Good - Heavy, >40% cover		
<b>Medium</b> - some new and old worm and/or root channels, weak plow pan	Medium - Moderate, 20%-40% cover		
Poor - very few worm and/or root channels, solid mass, hard plow pan	Poor - Light, <20% cover		
Sail Organisms (anxing)	Quality Factor		
Soil Organisms (spring)  Good - many insects, worms and fungi	Good		
	Medium -		
Medium - some insects, worms and fungi			
Poor - few insects, worms or fungi	Poor -		
	Notes:		